

## **Emerging Technologies - Technology review Paper**

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This talk will provide a summary of technology advances relevant to the SLR community as reported at the 2006 Canberra workshop and elsewhere. In particular, we will provide an overview of current kilohertz systems and supporting technologies such as picosecond transmitters, photon-counting detectors, and precision timers for ground and spaceborne systems. The current state of multiwavelength ranging will be described, and hardware developments related to autonomous ranging will be summarized. Finally, we will review development activities related to new applications such as laser time transfer, interplanetary transponders and their simulation, and photon-counting 3D imaging lidars/altimeters.